

# PATENT ABSTRACTS OF JAPAN

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## (54) METHOD FOR DETECTING LOADED CONDITION OF CONTAINER BY CARGO HANDLING DEVICE

(57)Abstract:

**PROBLEM TO BE SOLVED:** To provide a method for detecting a loaded condition of containers by a cargo handling device, which accurately controls the cargo handling device by detecting the condition of a container group on a truck deck.

**SOLUTION:** The method for detecting a loaded condition of containers by a cargo handling device comprises the steps of, when a truck 2 enters an input port 1a provided as X-Y plane coordinate data beforehand, roughly moving a camera 10 installed on a traveling and laterally moving cargo handling device 4 to at least two corners opposed to each other on the entire upper surface of a container group based on an X-Y plane coordinate and, after a space part surrounded by the corners of four containers 3 is detected from the pictured images, determining each of the center coordinate of the space part, detecting the position of the entire group of containers by comparing there center coordinates with the X-Y plane coordinate. It further comprises the steps of, after detecting the number of pixels at the corners of four containers 3 in a specified area by aligning the center of the space part with the center of the pictured area, a distance to the corners of four containers 3 is determined for detection of the height of the container group.




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